

AMENDMENTS TO THE CLAIMS

Claims 1-2 were pending in this application. By this amendment, applicant cancels Claims 1-2 and submits new Claims 3-26.

1. (Canceled)
2. (Canceled)
3. (New) A driver for driving a transmission line connected to a load, the transmission line having an input and an output, comprising:
 - a. a signal generation system that generates at least a first drive signal, a second drive signal and a third drive signal, the second drive signal having a level greater than the first drive signal, and the third drive signal having a level greater than the second drive signal; and
 - b. a controller in communication with said signal generation system to cause said signal generation system to deliver the first drive signal, then the second drive signal, and then the third drive signal to the input of the transmission line, the third drive signal beginning to be delivered to the input of the transmission line approximately when a reflection of the second drive signal from the output of the transmission line first arrives at the input to the transmission line;wherein the driver is arranged to drive a plurality of transmission lines of varying length.
4. (New) The driver of claim 3 wherein said signal generation system includes a source of the second drive signal and wherein said source includes an energy-storage device.
5. (New) The driver of claim 4 wherein said energy-storage device receives all of its charge solely from the transmission line.
6. (New) The driver of claim 4 wherein said energy-storage device includes a capacitor.

7. (New) The driver of claim 3 wherein the level of the second drive signal is approximately midway between the level of the first drive signal and the third drive signal.

8. (New) The driver of claim 3 wherein the level of the third drive signal is approximately equal to the reflected level of the second drive signal when it first arrives at the input of the transmission line.

9. (New) The driver of claim 3 wherein said signal generation system also generates a plurality of drive signals, in addition to the first drive signal, the second drive signal and the third drive signal.

10. (New) The driver of claim 9 wherein said signal generation system includes a source for each of the plurality of additional drive signals and wherein said source includes an energy-storage device.

11. (New) The driver of claim 10 wherein said energy-storage device receives all of its charge solely from the transmission line.

12. (New) The driver of claim 10 wherein said energy-storage device includes a capacitor.

13. (New) The driver of claim 3 wherein:
a. said signal generation system includes a supply for generating each of the drive signals and a switching system that selectively connects each of the drive signals to the input of the transmission line; and wherein
b. said controller controls said switching system.

14. (New) The driver of claim 3 wherein said controller also causes said signal generation system to deliver the third drive signal, then the second drive signal and then the first drive signal to the input of the transmission line, the first drive signal beginning to be delivered to the input of the transmission line at approximately when a reflection of the second drive signal from the output of the transmission line first arrives at the input to the transmission line.

15. (New) A process for driving a transmission line connected to a load, the transmission line having an input and an output, comprising:

a. generating at least a first drive signal, a second drive signal and a third drive signal, the second drive signal having a level greater than the first drive signal and the third drive signal having a level greater than the second drive signal; and

b. delivering the first drive signal, then the second drive signal and then the third drive signal to the input of the transmission line, the third drive signal beginning to be delivered to the input of the transmission line approximately when a reflection of the second drive signal from the output of the transmission line first arrives at the input to the transmission line whereby a reflection of a transition is sensed upon arrival at the input to the transmission line, wherein the process is adapted to drive a plurality of transmission lines of varying length.

16. (New) The process of claim 15 wherein a source is used to provide the second drive signal and wherein the an energy-storage device.

17. (New) The process of claim 16 wherein the energy-storage device receives all of its charge solely from the transmission line.

18. (New) The process of claim 16 wherein the energy-storage device includes a capacitor.

19. (New) The process of claim 15 wherein the level of the second drive signal is approximately midway between the level of the first drive signal and the third drive signal.

20. (New) The process of claim 15 wherein the level of the third drive signal is approximately equal to the reflected level of the second drive signal when it first arrives at the input of the transmission line.

21. (New) The process of claim 15 also comprising generating a plurality of drive signals in addition to the first drive signal, the second drive signal and the third drive signal.

22. (New) The process of claim 21 wherein a source is used to generate each of the plurality of additional drive signals and wherein the source includes an energy-storage device.

23. (New) The process of claim 22 wherein the energy-storage device receives all of its charge solely from the line.

24. (New) The process of claim 22 wherein the energy-storage device includes capacitor.

25. (New) The process of claim 15 wherein:
a. a supply generates each of the drive signals and a switching system selectively connects each of the drive signals to the input of the transmission line; and wherein
b. a controller controls the switching system.

26. (New) The process of claim 15 also comprising delivering the third drive signal, then the second drive signal and then the first drive signal to the input of the transmission line, the first drive signal beginning to be delivered to the input of the transmission line at approximately when a reflection of the second drive signal from the output of the transmission line first arrives at the input to the transmission line.